## KINCAID + BRYANT

## **Consulting Engineers**

A professional corporation

## Mechanical • Electrical • Plumbing • Fire Protection • Value Engineering

P.O. Box 3476

Lynchburg, Virginia 24503

725 Church Street, 7th floor Lynchburg, Virginia 24504

phone: 434-846-6510

fax: 434-846-0005

To:

**All Document Holders** 

From:

KINCAID + BRYANT

Date:

November 21, 2007

Comm. No.:

07008

Project:

Replace Rethermalization and Other Kitchen Equipment at Seven (7) Facilities Statewide

in Virginia

Project Code: 720-07720-001

RE:

Addendum No. 3

## Gentlemen:

Enclosed for your information is a copy of Addendum No. 3, including changes and modifications to the Specifications and Drawings, for the above referenced project.

Please attach this addendum to all copies of the Contract Documents in your possession so that they may be brought up-to-date.

Acknowledgment of receipt of this addendum is required on the Bid Form.

Sincerely,

KINCAID + BRYANT

David A. Kincaid, PE

David A. Kinconil

Enclosure

# KINCAID + BRYANT

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P.O. Box 3476 Lynchburg, Virginia 24503 725 Church Street, 7th floor Lynchburg, Virginia 24504

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Date: November 21, 2007

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Project: Replace Rethermalization and Other Kitchen Equipment at Seven (7) Facilities Statewide

in Virginia

Project Code: 720-07720-001

RE: Addendum No. 3

At the time of submission of bids, written acknowledgment of receipt of this Addendum by the Bidder shall be made in the appropriate blank on the Bid Form.

This Addendum has been issued to all Document Holders on record with our office. Bidders shall see that all Sub-Contractors are properly notified of the applicable provisions herein.

The information in this Addendum supersedes any contradictory information or omission set forth in the Contract Documents, including all previous addendums.

**End of ADDENDUM NO. 3** 

Addendum No. 3, dated November 21, 2007, to Bidding Documents for Replace Rethermalization and Other Kitchen Equipment at Seven (7) Facilities Statewide in Virginia, Plans and Specifications dated October 26, 2007, K&B File No. 07008, Project Code: 720-07720-001.

TO:

PLAN HOLDERS OF RECORD

FROM:

KINCAID ◆ BRYANT, Consulting Engineers

725 Church Street, 7<sup>th</sup> Floor

Allied Arts Building Lynchburg, VA 24504

This Addendum forms a part of the Contract Documents and modifies the Plans and Specifications dated October 26, 2007, as noted below. Acknowledge receipt of this Addendum on the Bid Form. Failure to do so may subject Bidder to disqualification.

## **GENERAL**

1. The date for receiving bids has changed as follows:

"Sealed bids will be received at DMHMRSAS, Office of Architectural & Engineering Services, 1220 Bank Street, Room 731, 7<sup>th</sup> Floor Jefferson Building, Richmond, VA 23219. **The deadline for submitting bids is 2:00 P.M. sharp**, **as determined by the Bid Officer, on December 12, 2007.** 

The bids will be opened publicly and read aloud **beginning** at 2:00 P.M., on December 13, 2007, at the same location."

- 2. Contractor can reuse existing Rethermalization Condensing Unit concrete pads for new Rethermalization Condensing Units if pads are of sufficient size for the new units and the pads are in good repair.
- 3. Contractor shall provide electrical service for Rethermalization and Kitchen Equipment as recommended by equipment manufacturer.
- 4. Contractor shall reuse existing ceiling, wall and floor openings where practicable.

## **SPECIFICATIONS**

SECTION 11400 - FOOD SERVICE EQUIPMENT

Delete in its entirety and add the attached Section 11400 – Food Service Equipment

## **DRAWINGS**

CVTC6: Change "Floor Plan", see attached sketches CVTCSK1 and CVTCSK2.

## **PRE-BID QUESTIONS**

1. Question: The specification lists Item No. 15 as a "Dish Dispenser", 7.75 inch diameter plates, Carter Hoffman UC208. However, the drawings list the item as a "Poker Chip Dish Dolly". Which is the correct description of the desired item?

Response: See attached Section 11400.

2. Question: The specification lists Item No. 16 as a "Dish Dispenser", 9 inch diameter plates, Carter Hoffman UC208. However, the drawings list the item as a "Poker Chip Dish Dolly". Which is the correct description of the desired item?

Response: See attached Section 11400.

3. Question: Section 11400 Page 18 Paragraph 6: Specification indicates stainless steel rods. Is standard chrome plated or poly-coated rods acceptable?

Response: No.

4. Question: Section 11400 Page 18 Paragraph 7: Specification indicates stainless steel rods. Is standard chrome plated or poly-coated rods acceptable?

Response: No.

5. Question: Section 11400 Page 18 Paragraph 8: Please clarify specification concerning bumper system. Specification noted is not consistent with manufacturer's model number.

Response: See attached Section 11400.

- 6. Question: Section 11400 Page 18 Paragraph 8: "Refrigerator, 1-section, (14) Traulsen & Co. Inc. RHT1 W UT or equal". The quantity indicated on the drawings is 12. What is the reference of the (14) on the item description? Response: The (14) was a misprint. The quantity of units is as indicated on the drawings. See attached Section 11400.
- 7. Question: Section 11400 Page 21 Paragraph 20: Specification requires modification. No details are given on drawing SWVTC14, except top view conveyor block shown. What is the name of the manufacturer and the model number? What is the specific nature of the modification required?

Response: The existing equipment is custom made and there is no manufacturer name. The existing equipment currently handles 13" wide by 21" long trays. The tray holders need to be modified to handle a 13" wide by 21" long tray. There will be no details.

8. Question: Section 11401 Page 12 Paragraph 10: Are standard fabricated metal slides acceptable?

Response: Yes, if the cars are made of stainless steel. If anodized aluminum carts are provided, then only anodized aluminum slides will be acceptable. Skydyne will meet the specification (www.skydyne.com).

 Question: Section 11401 Page 12 Paragraph 10: Is it acceptable to place the door drop latch on the side of the unit rather than the top? Response: Latch on side is acceptable.

10. Question: Section 11401 Page 12 Paragraph 10: Is fabricated metal frame construction acceptable?

Response: Only stainless steel or anodized aluminum is acceptable.

11. Question: Section 11401 Page 10 Paragraph 4: Is the STT (safe to touch) requirement an official federal, state or local regulation? If so, please direct us to the origin. We cannot find any official requirement for external surfaces to be at the very low temperature of 110 degrees Fahrenheit. Although our rethermalization cart does comply with the appropriate UL safety standards for surface temperatures it will not meet this extreme requirement. It is our opinion that no existing rethermalization cart can come close to meeting this requirement. It will require substantial modifications and additional cost for any supplier to comply. Would you consider raising this surface temperature requirement to a level which is uncomfortable to the touch but won't actually cause a burn hazard? We suggest that temperature to be about 140 degrees Fahrenheit. We want to provide a solution that is satisfactory in terms of both safety and cost. Further explanation of the objective of this requirement would be helpful.

Response: The concern of many of the facilities was safety for their patients, some of whom will accidentally touch hot equipment and some who wish to harm themselves. The Safe-to-Touch temperature proposed was based on Joint Commission Requirements for hot water temperature. Although metal is not water, we decided to use this as a guide. Creative solutions to resolve this issue are solicted.

12. Question: Section 11401 Page 10 Paragraph 4: Would you allow the plastic cart components to have a higher surface temperature than the metal components since they transfer heat at a slower rate and do not feel as hot to the touch as metal at the same temperature?

Response: Yes.

- 13. Question: Section 11401 Page 8-9 Paragraph 4.B.1.c: There is a stated requirement that the air temperature inside the rethermalization cart be maintained within a 6 degree Fahrenheit range from front to back and top to bottom. Is this requirement for both hot and cold air temperatures? Can you provide your test criteria for this requirement? We need to know the number of probes, exact location etc. Would you specifically identify at what time in the retherm/hold cycle you will be taking these readings?
  - Response: This is a project requirement and it is the manufacturer's responsibility to provide conformance.
- 14. Question: Section 11401 Page 9 Paragraph 2: Is the clear locking cover over the controller necessary if the controller has three level password protection?

  Response: Yes.
- 15. Question: How will the state evaluate the bid responses? Will it be a weighted scale? If so, how will the following factors be weighted? Price, longevity of company in Retherm/Cook-Chill, Specification Compliance, US made, etc.
  - Response: Award of contract will be based on low bid.
- 16. Question: NVTC-4 shows (E) EF-11 and (E) EF-6 noted to remove existing exhaust fans. These fans appear to be located in the same place as fans DWE-1 and DWE-2 on drawing NVTC-6 that are noted with the dish washers as connected to existing (wiring to start with dish washer). Are DWE-1 and DWE-2 new exhaust fans to be installed? If so, they are not on the equipment list.
  - Response: The fans are new. They are not indicated on the Food Service Equipment Schedules since the fans are not food service equipment.
- 17. Question: Is the sink, cabinet, etc to be provided also where the under dish washer is to be installed? Drawing NVTC-16 shows connecting new lines to existing water and drains. NVTC-15 shows a lot of detail regarding the construction of the counter and dish machine. Please clarify the scope of what is to be provided on this.
  - Response: Drawing NVTC14 indicates no demolition in this area. Drawing NVTC15 indicates that the new counter is an Additive Bid Item. Drawing NVTC 16 indicates connecting to existing piping.
- 18. Question: Addendum 2 page 4, paragraph SVTC45 "Foodservice Equipment Schedule" Can you verify that the revised total quantity for item 12 (30-Tray Transport Cart) is 90 (original total was 70).

  Response: Addendum 2 is correct.
- 19. Question: Section 11401 Page 1 Paragraph 1.2.C: For Product Verification demo required form low-bidder, how many "add-on's / options" are required

for demo assessment, ie, towbar, cart door locks, Plexiglas cover on control panel, message in plain text on control panel? As many are optional add-on options, we need to know you most important criteria to pass test, so if we need to order a specific demo unit for your criteria. We are able to understand your performance criteria/priorities and get this unit produced immediately.

Response: Demo unit must meet entire specification except self-contained unit will be accepted.

20. Question: Section 11401 Page 1 Paragraph 1.2.C and Pre-Meeting Addendum 1 XVII Additional Discussion Items, D(#2): Regarding test unit docking station (self-contained): As on-board compressor size is irrelevant for temperature pull-down time and adjudication of remote compressor performance is a critical issue within the bid specification, please confirm how assessment will be conducted if self-contained unit is supplied for on-site cold temperature performance verification.

Response: Self-contained or remote condenser should make no difference.

21. Question: Section 11401 Page 10, Item No. 4: As the cart width will be the same as the 24-Tray 30-Tray versions, but the depth decreased, can the facility layout for those areas utilizing this size cart accommodate a full cart door which when opened and folded back will extend beyond the cart frame or are two half doors mandatory.

Response: Standard single door is required.

## **END OF ADDENDUM NO. 3**

## SECTION 11400 - FOOD SERVICE EQUIPMENT

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. This Section includes food service equipment indicated on Drawings and schedules.
- B. Owner-Furnished Equipment: Where indicated, Owner will furnish equipment items.
- C. Related Sections: The following Documents and Sections contain requirements that relate to this section:
  - 1. Refer to Division 15 Sections for supply and exhaust fans; exhaust ductwork; service roughing-ins; drain traps; atmospheric vents; valves, pipes, and fittings; fire extinguishing systems; and other materials required to complete the food service equipment installation.
  - 2. Refer to Division 16 Sections for connections to fire alarm systems, electrical wiring, disconnects, and other electrical materials required to complete the installation of the food service equipment.

## 1.2 DEFINITIONS

A. Terminology Standard: Refer to NSF 2, "Food Equipment" or other applicable NSF standards for definitions of food service equipment and installation terms not otherwise defined in this Section or in other referenced standards.

## 1.3 SUBMITTALS

- A. Product Data: For each type of food service equipment indicated. Include manufacturer's model number and accessories and requirements for access and maintenance clearances, water and drainage, power or fuel, and service-connections including roughing-in dimensions.
- B. Shop Drawings: For food service equipment not manufactured as standard production and catalog items by manufacturers. Include plans, elevations and sections in a minimum scale of 3/4" = 1'-0", roughing-in dimensions, fabrication details, service requirements, and attachments to other work.
- C. Wiring Diagrams: Details of wiring for power, signal, and control systems and differentiating between manufacturer-installed and field-installed wiring.
- D. Piping Diagrams: Details of piping systems and differentiating between manufacturer-installed and field-installed piping.

- E. Coordination Drawings: For locations of food service equipment and service utilities. Key equipment with item numbers and descriptions indicated in Contract Documents. Include plans and elevations of equipment, access- and maintenance-clearance requirements, details of concrete or masonry bases and floor depressions, and service utility characteristics.
- F. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for exposed products with color finishes.
- G. Samples for Verification: Of each type of exposed finish required, minimum 4-inch-square or 6-inch- long sections of linear shapes and of same thickness and material indicated for work. Where finishes involve normal color and texture variations, include Sample sets showing the full range of variations expected.
- H. Product Certificates: Signed by manufacturers of refrigeration systems or their authorized agents certifying that systems furnished comply with requirements and will maintain operating temperatures indicated in the areas or equipment that they will serve.
- I. Maintenance Data: Operation, maintenance, and parts data for food service equipment to include in the maintenance manuals specified in Division 1. Include a product schedule as follows:
- J. Piping Diagrams: Details of piping systems and differentiating between manufacturer-installed and field-installed piping.
- K. Product Schedule: For each food service equipment item, include item number and description indicated in Contract Documents, manufacturer's name and model number, and authorized service agencies' addresses and telephone numbers.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer to perform work of this Section who has specialized in installing food service equipment, who has completed installations similar in design and extent to that indicated for this Project, and who has a record of successful in-service performance.
- B. Manufacturer Qualifications: Engage a firm experienced in manufacturing food service equipment similar to that indicated for this Project and with a record of successful in service performance.
- C. Source Limitations: Obtain each type of food service equipment through one source from a single manufacturer.
- D. Product Options: Drawings indicate food service equipment based on the specific products indicated. Other manufacturers' equipment with equal size and

performance characteristics may be considered. Refer to Division 1 Section "Substitutions."

- E. Regulatory Requirements: Comply with the following National Fire Protection Association (NFPA) codes:
  - 1. NFPA 54, "National Fuel Gas Code."
  - 2. NFPA 70, "National Electrical Code."
  - 3. NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations"
- F. Listing and Labeling: Provide electrically operated equipment or components specified in this Section that are listed and labeled.
  - 1. The Terms "Listed" and "Labeled": As defined in the National Electrical Code, Article 100.
  - 2. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory" (NRTL) as defined in OSHA Regulation 1910.7.
- G. AGA Certification: Provide gas-burning appliances certified by the American Gas Association (AGA).
- H. ASME Compliance: Fabricate and label steam-generating and closed steam-heating equipment to comply with ASME Boiler and Pressure Vessel Code.
- I. ASHRAE Compliance: Provide mechanical refrigeration systems complying with the American Society of Heating, Refrigerating and Air-Conditioning Engineers' ASHRAE 15, "Safety Code for Mechanical Refrigeration".
- J. NSF Standards: Comply with applicable NSF International (NSF) standards and criteria and provide NSF Certification Mark on each equipment item, unless otherwise indicated.
- K. ANSI Standards: Comply with applicable ANSI standards for electric-powered and gas burning appliances; for piping to compressed-gas cylinders; and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.
- L. SMACNA Standard: Where applicable, fabricate food service equipment to comply with the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines," unless otherwise indicated.
- M. Pre-installation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings." Review methods and procedures related to food service equipment including, but not limited to, the following:

- 1. Review access requirements for equipment delivery.
- 2. Review equipment storage and security requirements.
- 3. Inspect and discuss condition of substrate and other preparatory work performed by other trades.
- Review structural loading limitations.
- 5. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver food service equipment as factory-assembled units with protective crating and covering.
- B. Store food service equipment in its original crating and protective covering. Store in a dry location.
- C. Reused Equipment: Coordinate and show sizes, utilities, and other requirements as determined by inspecting equipment noted as existing to be reused. Include all costs for tagging, marking, removing, storing, cleaning, redelivering and installing such equipment. Provide, if specified, accessories necessary for the equipment to conform with the new application. All requirements within the contract documents apply to reused equipment as if contractor furnished, except warranties.

## 1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify dimensions of food service equipment installation areas by field measurements before equipment fabrication and indicate measurements on Shop Drawings and Coordination Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish required dimensions and proceed with fabricating equipment without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

## 1.7 COORDINATION

- A. Coordinate equipment layout and installation with other work including light fixtures, HVAC equipment, and fire-suppression system components.
- B. Coordinate location and requirements of service-utility connections.

## 1.8 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Refrigeration Compressor Warranty: Submit a written warranty signed by manufacturer agreeing to repair or replace compressors that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
  - 1. Breakage.
  - 2. Faulty operation.
- C. Warranty Period: 5 years from date of Substantial Completion for refrigeration compressors. All other equipment provided shall include a one-year warranty covering all parts and labor, plus any extended warranties as normally provided by individual manufacturers. All equipment including refrigeration systems both self-contained and remote shall be warrantied by the installer on the project for one year as indicated in the preceding sentence. The warranty begins the first day of the first year the equipment is put into operation by the Owner of the facility.

## PART 2 - PRODUCTS

## 2.1 MATERIALS

- A. Stainless-Steel Sheet, Strip, Plate, and Flat Bar: ASTMA666, Type304, stretcher leveled, and in finish specified in "Stainless Steel Finishes" article 2.6.
- B. Stainless-Steel Tube: ASTMA554, GradeMT-304, and in finish specified in "Stainless-Steel Finishes" Article 2.6.
- C. Zinc-Coated Steel Sheet: ASTMA653, G115 coating designation; commercial quality; cold rolled; stretcher leveled; and chemically treated.
- D. Zinc-Coated Steel Shapes: ASTMA36 zinc-coated according to ASTMA123 requirements.
- E. Plastic Laminate: Complying with NEMALD3 and NSF35 requirements; NSF certified for end-use application indicated; 0.050 inch (1.27 mm) thick for horizontal and vertical surfaces and 0.042 inch (1.07 mm) thick for post-formed surfaces; smooth texture; and easily cleanable.
  - 1. Color: As selected by Architect from manufacturer's full range of colors.

- F. Plywood and Lumber: Provide plywood and lumber as specified in Division6 Section "Interior Architectural Woodwork."
- G. Sealant: ASTMC920; TypeS, GradeNS, Class25, UseNT. Provide elastomeric sealant NSF certified for end-use application indicated. Provide sealant that, when cured and washed, meets requirements of Food and Drug Administration's 21CFR, Section177.2600 for use in areas that come in contact with food.
  - 1. Color: As selected by Architect from manufacturer's full range of colors.
  - 2. Backer Rod: Closed-cell polyethylene, in diameter larger than joint width.
- H. Tempered Glass: ASTMC1048, KindFT (fully tempered), ConditionA (uncoated surfaces), Type I (transparent), Class1 (clear), Qualityq3 (glazing select). Provide products complying with ANSIZ97.1, manufactured by horizontal (roller-hearth) process, and 6 mm thick, unless otherwise indicated. Provide exposed safety edges, if any, seamed before tempering.
- I. Plastic: Except for plastic laminate, provide plastic materials and components complying with NSF51.
- J. Sound Dampening: NSF-certified 3 mm thick tape-type sound-deadening material by 3-M or equal for use between metal support structures and underside of metal work surfaces.
- K. Gaskets: NSF certified for end-use application indicated; of resilient rubber, neoprene, or PVC that is nontoxic, stable, odorless, nonabsorbent, and unaffected by exposure to foods and cleaning compounds.

## 2.2 ACCESSORIES

A. Cabinet Hardware: Provide NSF-certified stainless steel hardware for equipment items as indicated.

## 2.3 FABRICATION, GENERAL

- A. Fabricate food service equipment according to NSF2 requirements. Use factory assembled components to greatest extent possible.
- B. Plastic-Laminate and Wood Casework: Fabricate according to requirements specified in Division6 Section "Interior Architectural Woodwork."
- C. Welding: Use welding rod of same composition as metal being welded. Use methods that minimize distortion and develop strength and corrosion resistance of base metal. Provide ductile welds free of mechanical imperfections such as gas holes, pits, or cracks.

- 1. Welded Butt Joints: Provide full-penetration welds for full-joint length. Make joints flat, continuous, and homogenous with sheet metal without relying on straps under seams, filling in with solder, or spot welding.
- 2. Grind exposed welded joints flush with adjoining material and polish to match adjoining surfaces.
- 3. Where fasteners are welded to underside of equipment, finish reverse side of weld smooth and undepressed.
- 4. Coat unexposed stainless-steel welded joints with suitable metallic-based paint to prevent corrosion.
- After zinc-coated steel is welded, clean welds and abraded areas and apply SSPC-Paint20, high-zinc-dust-content, galvanizing repair paint to comply with ASTMA780.
- D. Fabricate field-assembled equipment prepared for field-joining methods indicated. For metal butt joints, comply with referenced SMACNA standard, unless otherwise indicated.
- E. Where stainless steel is joined to a dissimilar metal, use stainless steel welding material or fastening devices.
- F. Form metal with break bends that are not flaky, scaly, or cracked in appearance; where breaks mar uniform surface appearance of material, remove marks by grinding, polishing, and finishing.
- G. Sheared Metal Edges: Finish free of burrs, fins, and irregular projections.
- H. Provide surfaces in food zone, as defined in NSF2, free from exposed fasteners.
- I. Cap exposed fastener threads, including those inside cabinets, with stainless-steel lock washers and stainless-steel cap (acorn) nuts.
- J. Provide pipe slots on equipment with turned-up edges and sized to accommodate service and utility lines and mechanical connections.
- K. Provide enclosures, including panels, housings, and skirts, to conceal service lines, operating components, and mechanical and electrical devices including those inside cabinets, unless otherwise indicated.

## 2.4 STAINLESS STEEL EQUIPMENT

- A. Edges and Backsplashes: Provide equipment edges and backsplashes indicated complying with referenced SMACNA standard, unless otherwise indicated.
- B. Sound Dampening: NSF-certified 3 mm thick tape-type sound-deadening material by 3-M or equal for use between metal support structures and underside of metal work surfaces.

- C. Tables: Fabricate with reinforced tops, legs, and reinforced undershelves or cross bracing to comply with referenced SMACNA standard, unless otherwise indicated, and as follows:
  - 1. Tops: Minimum 0.0781-inch- (14 Gauge) thick stainless steel, unless otherwise indicated.
  - 2. Legs: 1-5/8 inch OD, minimum 0.0625-inch- (16 Gauge) thick stainless steel with stainless-steel gusset and adjustable insert bullet-type feet with minimum adjustment of 1 inch up or down without exposing threads, unless otherwise indicated.
  - 3. Undershelves: Minimum 0.0625-inch- thick stainless steel, unless otherwise indicated.
  - 4. Top and Undershelf Reinforcement: Provide minimum 0.0781-inch- thick, stainless steel reinforcing, unless otherwise indicated.
  - 5. Cross Bracing: 1-1/4 inch OD, minimum 0.0625-inch- thick stainless steel, unless otherwise indicated.
- D. Sinks: Fabricate of minimum 0.0781-inch- thick stainless steel with fully welded, 1-piece construction. Construct 2 sides and bottom of sink compartment from 1 stainless-steel sheet with ends welded integral and without overlapping joints or open spaces between compartments. Provide double-wall partitions between compartments with 1/2-inch- radius rounded tops that are welded integral with sink body. Cove horizontal, vertical, and interior corners with 3/4-inch (19-mm) radius. Pitch and crease sinks to waste for drainage without pooling. Seat wastes in diestamped depressions without solder, rivets, or welding.
  - 1. Wastes: 2-inch nickel-plated bronze, rotary-handle waste assembly with stainless-steel strainer plate and nickel-plated brass, connected overflow.
  - 2. Drainboards: Minimum 0.0781-inch- thick stainless steel, pitched to sink at 1/8 inch/12 inches of length. Reinforce drainboards with minimum 0.0781-inch- thick stainless steel 1-1/4" angle, unless otherwise indicated.
  - 3. Legs: 1-5/8 inch OD, minimum 0.0625-inch- thick stainless steel with stainless-steel gusset welded to 0.1094-inch- thick, stainless-steel support plate. Provide adjustable insert bullet-type feet with minimum adjustment of 1 inch up or down without exposing threads, unless otherwise indicated.
  - 4. Drainboard Braces: 1 inch OD, minimum 0.0625-inch- stainless steel tube for drainboard lengths longer than 24", unless otherwise indicated.
  - 5. Cross Bracing: 1-1/4 inch OD, minimum 0.0625-inch- thick stainless steel, unless otherwise indicated.
- E. Wall Shelves and Overshelves: Fabricate to comply with referenced SMACNA standard, unless otherwise indicated, and with minimum 0.0625-inch- thick, stainless-steel shelf tops.
- F. Drawers: Provide lift-out type, 1-piece, die-stamped drawer pan fabricated from 0.050-inch- thick stainless steel with inside corners formed with proper radius. Support drawer pan with 0.0625-inch- thick, stainless steel channel frame welded to

drawer front. Provide 1-inch- thick, double-wall front fabricated from 0.0625-inch-thick stainless steel and with integral recessed pull. Fill void in drawer front with semi-rigid fiberglass sound dampening. Mount drawers on NSF-certified, full-extension, stainless-steel drawer slides that have minimum 100-lb load capacity per pair, ball-bearing rollers, and positive stop. Mount drawer slides for self-closing on drawer housing as indicated.

## 2.5 EXHAUST HOOD FABRICATION

- A. General: Fabricate hoods indicated from minimum 0.050-inch- thick stainless steel, unless otherwise indicated. Comply with NFPA96 and requirements of authorities having jurisdiction.
  - 1. Refer to Division15 Sections for duct, fan, damper, and fire-extinguishing system requirements.
- B. Exhaust-Duct Collars: Minimum 0.0625-inch- thick stainless steet.

## 2.6 STAINLESS-STEEL FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
  - 1. Remove or blend tool and die marks and stretch lines into finish.
  - 2. Grind and polish surfaces to produce uniform, directional textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- B. Concealed Surfaces: No.2B finish (bright, cold-rolled, unpolished finish).
- C. Exposed Surfaces: No.4 finish (bright, directional polish).
- D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
- E. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipment.

## 2.7 ELECTRICAL AND MECHANICAL REQUIREMENTS

A. Standard UL listed materials, devices, and components shall be selected and installed in accordance with NEMA Standards and recommendations and as required for safe and efficient use and operation of the foodservice equipment without objectionable noise, vibration, and sanitation problems.

- Provide recognized commercial grade signals, "on-off" pushbuttons or switches, and other speed and temperature controls as required for operation of each item, complete with pilot lights and permanent engraved, plastic laminate signs and graphics identifying each item. Provide stainless steel cover plates at controls and signals.
- 2. Each item requiring electrical power shall be equipped with either a terminal box for permanent connection or with cord and plug for interruptible connection, as indicated. Provide NEMA standard grounding-type plugs, where used.
- 3. Furnish all foodservice equipment completely wired internally using wire and conduit suitable for wet locations, including a separate grounding wire.
- 4. Provide Hubbell three-wire or four-wire grounding-type connectors and neoprene cords installed on each item of plug-in equipment. Coordinate the work with the Contractor so that the receptacles provided match the specific plugs provided as part of the plug-in equipment. Reduce the length of all cords furnished with the specified equipment to a suitable or appropriate length and so they do not interfere with other equipment or foodservice operations.
- 5. All electrically heated equipment shall be internally wired to a thermostatic control and an "on-off" red neon light indicator, which shall be mounted in a terminal box on a removable stainless steel access panel.
- 6. Only rigid steel conduit shall be used, zinc-coated where unexposed and chrome-plated where exposed. All wiring shall be run concealed wherever possible.
- 7. Provide on or for each motor-driven appliance or electrical heating or control unit, a suitable control switch or starter of the proper type and rating and in accordance with Underwriters Code wherever such equipment is not built in. All other line switches, safety cut-outs, control panels, fuse boxes, other control fittings, and connections, when not an integral part of the unit or furnished loose by the equipment manufacturer shall be furnished and installed with electrical work unless otherwise specified. All electrical controls, switches, or devices provided loose for field installation as a part of the item specified shall be installed in the field by the Contractor unless otherwise specified.
- 8. All equipment furnished shall be so wired, wound, or constructed so as to conform with the characteristics of electrical and other services at the job site.
- 9. Appliances shall be furnished complete with motors, driving mechanism, starters, and controllers, including master switches, timers, cut-outs, reversing mechanism, and other electrical equipment if and as applicable. Wiring and connection diagrams shall be furnished with electrically operated machines and for all electrically wired fabricated equipment.
- Appliances shall be of rigid construction, free from objectionable vibration.
   Quietness of operation of all foodservice equipment is a requirement. Remove or
   repair any equipment producing objectionable noise and/or vibration as directed
   by the Architect.
- 11. Motors shall be of the drip-proof, splash proof, or totally enclosed type, having a continuous duty cycle and ball bearings, except small timing motors which may have sleeve bearings. All motors shall have windings impregnated to resist moisture. Motors located where subject to deposits of dust, lint, or other similar matter from the machine on which installed shall be of the totally enclosed type. Motors shall have ample power to operate the machines for which designated

under full load operating conditions without exceeding their nameplate ratings. Horsepower requirements on driven equipment shall be determined by the manufacturer based on normal operation at maximum capacity. The nominal rated motor horsepower shall be not less than the horsepower required for normal operation of the equipment at maximum capacity. Insulation shall be NEMA Class B, or better.

- 12. All switches, controls, etc., shall be conspicuously labeled as to use with plastic nameplates secured to the adjacent surface as previously specified in Article 2.01-C. Submit a sample for approval.
- 13. Where specified for custom fabricated equipment, provide a compartment with electrical sub-panel that shall be pre-wired in conduit concealed in cabinet body construction and connected to all electrical components built into or set upon the counter. Electrical sub-panel shall be UL listed, 3-phase, 4-wire circuit breaker type with a ground buss main breaker and individual breakers for each serviced load. All buss shall be copper and the circuit breakers shall be the molded case, bolt-on type with thermomagnetic quick-make, quick-break trip. Multi-pole circuit breakers shall have an interrupting capacity of 10,000 amperes at 120 volts and there shall be a separate breaker for each connected load. Each breaker shall be sized for 125% of the connected load and a minimum of two (2) extra, single pole, 20 amp circuit breakers shall be provided. The loads shall be connected through the breakers in a phased sequence to balance the load on each phase. Main connection to the panel shall be made with electrical work.
- B. Water inlets shall be located above the positive water level wherever possible to prevent siphoning of liquids into the water supply system. Wherever conditions shall require a submerged inlet, a suitable type of check valve (except in jurisdictions where check valves are prohibited) and vacuum breaker shall be provided with the fixture to prevent siphoning. Where exposed, piping and fittings shall be chrome-plated. Where vacuum breaker piping is through equipment, provide chrome-plated escutcheon plates to cover holes.
  - 1. Provide and install indirect waste lines from equipment which shall discharge into floor drains or safe wastes, chrome-plated where exposed. Extend to a point at least 1" (or as required by local or state code) above the rim of the floor drain, cut bottom on 45-degree angle and secure in position.
  - 2. All horizontal-piping lines shall be run at the highest possible elevation and not less than 6" above the floor, through equipment where possible.
  - 3. No exposed piping in or around fixtures or in other conspicuous places shall show tool marks or more than one thread at the fitting.
  - 4. All steam operating valves on or in fabricated and purchased foodservice equipment shall be provided with composition hand wheels, which shall remain reasonably cool in service.
  - 5. Provide suitable pressure-reducing valves for all equipment with such components that might reasonably be expected to be affected over a period of

time by adverse pressure conditions, including but not limited to dishwashers, booster heaters, coffee urns, steam boilers, etc.

- C. Provide and install complete refrigeration systems--charged, started, and operating properly--including, but not limited to: compressors, condensers, racks, coils, vibration eliminators, sight glasses (moisture indicating type), expansion valves, filters, oil separators, thermostats, defrost time clocks, all controls and control wiring, liquid line driers, piping, and refrigeration grade copper tubing with all sweat joints using Safety-Silv No.1200 (with as few joints as possible).
  - 1. Where specifications call for pre-piped lines (i.e., from a fixture to a valve compartment, etc.), provide such work in strict conformance with other sections of the specifications which set forth standards for this type of work or in conformity with the requirements of the Board of Fire Underwriters or ASHRAE Standards, whichever is the greater.
  - 2. All mechanically refrigerated cold pans shall have a normally closed liquid line electric solenoid valve installed before the expansion valve and wire to a silent-type toggle switch complete with an "on-off" red neon light indicator and both mounted in a terminal box on a removable access panel. This switch shall be fed by a separate control circuit and shall not to be wired into the compressor circuit so that it shall stop the flow of refrigerant to the cold pan and not turn off the compressor. The compressor shall then pump down and turn off through the action of the pressure control.
  - 3. Each refrigeration item specification is written to provide minimum specifications and scope of work. All refrigeration equipment shall be designed and installed to maintain the following general temperatures unless otherwise specified.

a.	Walk-in Refrigerators	+35°F.
b.	Walk-in Freezers	-10°F.
c.	Reach-in Refrigerators	+35°F.
d.	Reach-in Freezers	-10°F.
e.	Undercounter Refrigerators	+35°F.
f.	Undercounter Freezers	-10°F.
q.	Cold Pan	+0°F.

- 4. Provide (including payment if subcontracted) all electrical and refrigeration components needed for complete refrigeration systems and complete (or have completed by the respective trades) all connections of and to said components.
- 5. An evaporator coil defrost system shall be provided and installed by the Contractor on all walk-in refrigerator and freezer rooms where the refrigeration systems are designed to operate at room temperature of less than 35°F.
- 6. Verify the requirements of and provide any or all additional refrigeration specialty(s) or component(s) required or recommended by the manufacturer for proper operation under the specific operating conditions and location of each system specified.
- 7. Verify and provide manufacturer's certification (or certification by manufacturer's authorized agent) that the equipment selection hereinafter specified for each refrigeration system is properly sized and shall meet the operating requirements

- set forth for each system regarding maintaining specified operating temperature, hours of compressor running time, and system pressures and velocities as recommended by the equipment manufacturer(s).
- 8. All refrigeration systems shall be installed and wired in strict conformance with the manufacturer's instructions and recommendations. The Contractor shall ensure that all refrigeration condensing units are ventilated properly and are accessible for repair, maintenance, and inspection.
- 9. Hang the evaporator coils per the manufacturer's recommendation at the locations as shown on the drawings. Unit shall be mounted sloping such that the drain pans are pitched to the drain lines. The coils shall be hung using nylon or other approved non-conductive, non-corrosive fasteners. Unless specified otherwise, coils shall be installed 4" from the interior walk-in ceiling. Furnish #12 gauge galvanized steel fish plates of suitable size and shape on the exterior ceiling of the walk-in to spread the weight of the coils adequately. The coils shall be connected to the condensing unit and the installation shall constitute a complete working system capable of maintaining the interior temperatures specified regardless of the heavy usage the walk-in units may receive.
- 10. Furnish and install a copper or PVC drain line from each coil outlet to a point 1" above the floor drain. Drain lines shall be trapped immediately above the floor drain. The freezer drain line shall be wrapped with a continuous electrified heater tape that shall be furnished as part of the refrigeration system contract.
- 11. Refrigeration tubing shall be the Type L, ACR hard drawn degreased, sealed copper and shall be installed with horizontal runs sloped 1" per 20 feet toward the condensing units. All refrigerant piping shall be properly supported by adjustable hangers spaced and adjusted to the drop required. Where vertical runs of more than 5' occur in the suction line, the risers shall be trapped at the bottom. Piping is to be installed so that refrigerant or oil cannot drain back into the coils from the suction line.
- 12. All suction and refrigerant lines shall be insulated with minimum 1/2" Armstrong armaflex or equal cellular type insulation. Metal pipe sleeves shall be provided where piping passes through a wall, ceiling, or floor. Space around the tubing shall be filled with mastic insulating compound. Install a permanent suction line filter in each compressor suction line with pressure fitting ahead of the filter to facilitate checking of pressure drop through the filter. All penetrations through walk-in cooler or freezer structures shall be fully insulated and sealed to be vapor tight to prevent condensation within any light fixtures, switch boxes, junction boxes, or any other fittings. Refrigeration and drain lines shall be fully sealed and provided with escutcheon plates by the installer.
- 13. Furnish and completely install a thermostat to control the refrigeration temperatures for each individual compartment. The Contractor shall interconnect the blower coils with the condensing unit.
- 14. The condensing units shall be mounted on a welded steel rack. The rack shall contain all of the accessories and components necessary to form a complete condensing unit package. Each condensing unit shall have a factory mounted, pre-wired control panel/disconnect switch complete with circuit breakers, contactors, and time clocks as required.

- 15. The Contractor shall be responsible during check out and initial operation to make sure that:
  - a. All controls are properly adjusted, including refrigeration circuits, room air temperature controls, etc.
  - b. All condensers carry an overload protector.
  - c. That a competent service mechanic is available during the first eight (8) hours of operation.
  - d. That all switches, starters, and controls are identified as to function.
- 16. The refrigeration systems shall be furnished with a one-year refrigeration service contract, covering all parts and labor, with service available seven days per week, 24-hours per day. Continuation of the service contract after the first year shall be at the option of the Owner. The refrigeration system shall be warranted for one year and the compressors shall carry the manufacturer's extended five-year warranty.
- 17. Furnish four (4) copies of complete remote refrigeration system control wiring and piping diagrams. One (1) copy shall be framed in Plexiglas and mounted at compressor location.
- 18. Unless otherwise specified, all thermometers for walk-in units shall be furnished with suitable length armored capillary tubes to allow the sensing bulb to be installed in the incoming air stream to the blower coil with all runs fastened to the walk-in walls to prevent it from damage. This identical requirement applies to alarm systems when specified.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances, service-utility connections, and other conditions affecting installation and performance of food service equipment. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Examine roughing-in for piping, mechanical, and electrical systems to verify actual locations of connections before installation.

## 3.2 INSTALLATION, GENERAL

- A. Install food service equipment level and plumb, according to manufacturer's written instructions, original design, and referenced standards.
- B. Complete equipment field assembly, where required, using methods indicated.
  - 1. Provide closed butt and contact joints that do not require a filler.

- 2. Grind field welds on stainless-steel equipment smooth, and polish to match adjacent finish. Comply with welding requirements in "Fabrication, General" Article.
- C. Install equipment with access and maintenance clearances according to manufacturer's written instructions and requirements of authorities having jurisdiction.
- D. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.
- E. Except for mobile and adjustable-leg equipment, securely anchor and attach items and accessories to walls, floors, or bases with stainless-steel fasteners, unless otherwise indicated.
- F. Install hoods to comply with NFPA96 requirements and to remain free from vibration when operating.
- G. Install trim strips and similar items requiring fasteners in a bed of sealant. Fasten with stainless-steel fasteners at 48 inches (1200 mm) o.c. maximum.
- H. Install sealant in joints between equipment and abutting surfaces with continuous joint backing, unless otherwise indicated. Provide airtight, watertight, vermin-proof, sanitary joints.

## 3.3 PROTECTING

A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer that ensure food service equipment is without damage or deterioration at the time of Substantial Completion.

## 3.4 COMMISSIONING

- A. Startup Services: Engage factory-authorized service representatives to perform startup services and to demonstrate and train Owner's maintenance personnel as specified below.
  - Coordinate food service equipment startup with service-utility testing, balancing, and adjustments. Do not operate steam lines before they have been cleaned and sanitized.
  - 2. Remove protective coverings and clean and sanitize equipment, both inside and out, and relamp equipment with integral lighting. Where applicable, comply with manufacturer's written cleaning instructions.
  - 3. Test each equipment item for proper operation. Repair or replace equipment that is defective in operation, including units that operate below required capacity or that operate with excessive noise or vibration.

- 4. Test refrigeration equipment's ability to maintain specified operating temperature under heavy-use conditions. Repair or replace equipment that does not maintain specified operating temperature.
- 5. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- 6. Test motors and rotating equipment for proper rotation and lubricate moving parts according to manufacturer's written instructions.
- 7. Test water, drain, gas, steam, oil, refrigerant, and liquid-carrying components for leaks. Repair or replace leaking components.
- 8. Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance for each food service equipment item.
- 9. Review data in the operation and maintenance manuals. Refer to Division1 Section "Contract Closeout."
- 10. Review data in the operation and maintenance manuals. Refer to Division1 Section "Operation and Maintenance Data."
- 11. Schedule training with Owner, through Architect, with at least 7 days' advance notice.

## 3.5 SCHEDULE OF EQUIPMENT

- A. In the case of a discrepancy between the contract drawings and specifications, the greater quantity, more stringent, or more costly alternative shall be used as the basis of cost.
- B. Equipment that has received the EPA "Energy Star" rating shall be provided where possible.
- C. The following specified items of equipment are the basis for design of the project. The words "or equal" are implied for the specification of each item. Equal items are to be equal in quality, size and functionality. Items shall conform, to the satisfaction of the Architect, to the design and utility requirements as set forth in the Contract Documents. Any necessary revisions to the Contract Documents as a result of the above will be at the expense of the Contractor. <a href="Item numbers listed are as indicated">Item numbers listed are as indicated</a> on the Contract Documents.
  - 1. Item No. 13 Blast-Chiller, 200-Pound Roll-in (1) Traulsen RBC200
    - Alternate manufacturers and model numbers:
       Victory VBC220, Piper RCRC02T,or Approved Equal
    - b. Heavy-duty stainless steel exterior and interior construction
    - c. Communications capable and NAFEM Data Protocol Compliant
    - d. On-Board Batch Data Printer
    - e. Three (3) Chilling Functions:
      - 1) Blast Chill (135° to below 41°F in approx. 90-minutes)
      - 2) Soft Chill (for use with delicate products such as fresh seafood and produce)
      - 3) Freeze (target temp can be set for as low as -22°F)

- f. Three (3) Chilling Modes For Each Chilling Function:
  - 1) By Temperature
  - 2) By Product
  - 3) By Time
- g. Automatic Refrigerated Hold Mode After Each Cycle
- h. Chiller to accommodate one (1) roll-In rack with maximum dimensions of 72"
- i. High x 27" Wide x 29" Deep
- j. Magnetic Door Gasket
- k. Stainless Steel Breaker Caps
- I. Stainless Steel Roll-In Ramp(s) & Rack Guides
- m. Self-Closing and Stay Open Door Features
- n. Door with Lock hinged per the Plan
- o. Horizontal Work Flow Door Handle Guaranteed for Life
- p. Automatic Defrost With On-Demand Feature
- q. Adjustable Product Chill Target Temperatures
- r. Adjustable Product Holding Temperature
- s. One Year Parts/Labor Warranty
- 2. Item No. 14 Blast-Chiller Condensing Unit (1) Traulsen
  - a. Alternate manufacturers: Victory, Piper, or Approved Equal
  - b. Remote Condensing Unit by manufacturer of Blast Chiller, Item 13
  - c. R404a Refrigerant
  - d. Dual Self-Contained Refrigeration Systems to promote an energy efficient operation and maximize compressor life
  - e. All necessary omponents and parts for outdoor installation
  - f. All weather Housing
  - g. Floor-Mounted Condensate Evaporator, if drain is not available
  - h. Five Year Compressor Warranty
- 3. Item No. 15 Poker Chip Dolly (1) Cres Cor 501-D
  - Alternate manufacturers and model numbers:
     Cres Cor 501-D, Metro PCD-B Series, or Approved Equal
  - b. Adjustable Dividers
  - c. Corner Bumpers
- 4. Item No. 16 Food Processor (1) Robot Coupe Blixer R6 VN Series D
  - a. Alternate manufacturers and model numbers: Hobart and Mannhart, Inc.
  - b. Continuous feed attachment
  - c. Stainless steel bowl kit
  - d. Food pusher
  - e. Two plates: 1/8" slicing plate and 1/8" medium grating plate

- f. One additional plate as selected by Owner
- g. Cord and plug
- 5. Item No. 17 Tray Carrier (1) Ultimate Pizza & Hot Food Bag CLGPCR Bag with Rack Or Approved equal
  - a. Color: Standard
  - b. Painted wire rack with bottom and removable intermediate shelf
  - c. To hold meal trays, 13" x 21" x 5" high
  - d. Removable, washable liner that attaches wit bag with velcro
- 6. Item No. 18 Dome Rack, 7.75" Diameter Plate (1) Dinex 10018
  - Alternate manufacturers and model numbers:
     Aladdin, Kendrick Johnson or Approved Equal
  - b. Nominal 20" x 20" rack to consist of two parts:
  - c. Carrier fabricated from stainless steel rod
  - d. Flat base to hold carrier
  - e. Capacity of carrier to be (10) 7.75" Diameter plate covers
  - f. Carrier to be sufficiently strong to allow it to be placed directly into dishmachine
- 7. Item No. 19 Dome Rack, 9" Diameter Plate (1) Dinex 10053
  - a. Alternate manufacturers and model numbers: Aladdin, Kendrick Johnson or Approved Equal
  - b. Nominal 20" x 20" rack to consist of two parts:
  - c. Carrier fabricated from stainless steel rod
  - d. Flat base to hold carrier
  - e. Capacity of carrier to be (10) 9" Diameter plate covers
  - f. Carrier to be sufficiently strong to allow it to be placed directly into dishmachine
- 8. Item No. 20 Pan Rack (1) Cres Cor 207-1818-D
  - Alternate manufacturers and model numbers:
     Cres Cor 207-1818-D, Eagle ORF-1820-3, Piper ALT67-1826-18 or Approved Equal
  - b. Pan Stop
  - c. Corner Bumpers
- 9. Item No. 21 Refrigerator, 1-Section (1) Traulsen RHT132WUT-FHS
  - Alternate manufacturers and model numbers: Traulsen RHT132WUT-FHS, Victory. RS-1D-S7-EW, Continental DL1RX-SS, or Approved Equal
  - b. (2) Extra Standard Wire Shelves
  - c. 6" high Casters, Front Wheels with Brakes

- d. Doors hinged per the Plan
- e. Visual Alarm System
- 10. Item No. 22 Dishmachine (1) Hobart FT916S (5-4-7) / Booster Heater
  - a. Alternate manufacturers and model numbers:
     Stero STPCW Series, Meiko B-US Series, or Approved Equal
  - b. Left to right operation
  - c. Electric tank heat
  - d. Sealed dial type thermometer for each tank
  - e. Automatic enery saving shut off package
  - f. Stainless steel enclosure panels
  - g. Auto fill system
  - h. Common Water and Drain Connections
  - i. Strip curtains throughout machine
  - j. Variable speed control
  - k. Final rinse saver
  - Operator training video
  - m. Optional accessories:
  - n. Common Drain Connection, Unload End
  - o. Prewash temperature control (adjust utilities)
  - p. Modified Conveyor Belt: stainless steel rod every three rows
  - q. Single point electrical connection (Verify. Exising machine has separate connections.)
  - r. Built-in 39KW Electric Booster Heater
- 11. Item No. 23 Vent Duct, Round (1) Custom Fabricated
  - a. Fabricated per detail on drawing NVTC15 & CH2
- 12. Item No. 24 Vent Cowl (1) Hobart For Existing CRS66A
  - a. Attached to existing dishmachine
  - b. Connected to Vent Duct, Item 27
- 13. Item No. 25 Dishmachine with Blower Dryer (1) Hobart FT922BD (5-8-9)
  - Alternate manufacturers and model numbers:
     Stero STPCW-D Series, Meiko B-US Series, or Approved Equal
  - b. Right to left operation
  - c. Steam coil tank heat
  - d. Steam blower dryer 21 to 50 PSI
  - e. Hinged doors for all sections and for blower dryer
  - f. Sealed dial type thermometer for each tank
  - g. Automatic enery saving shut off package
  - h. Stainless steel enclosure panels

- i. Auto fill system
- j. Common Water and Drain Connections
- k. Strip curtains throughout machine
- I. Variable speed control
- m. Vent fan control
- n. Final rinse saver
- o. Operator training video
- p. Common Drain Connection, Unload End
- q. Prewash temperature control
- r. Special Conveyor Belt for Insulated Trays
- s. Metal crossrods placed in every three row on the conveyor belt
- t. Built-in steam booster heater
- u. Provided with Vent Duct, Item 23
- 14. Item No. 26 Dishwasher, Undercounter (1) Hobart LXiH-3
  - Alternate manufacturers and model numbers:
     Champion UH-B Series, Jackson HT, or Approved Equal
  - b. Alternate manufacturers: Champion and Jackson
  - c. Standard accessories:
  - d. Stainless steel top and front panel
  - e. Fresh water rinse system
  - f. One peg rack
  - g. One combination rack
  - h. Pumped drain
  - i. 70 degree rise booster heater
  - j. Detergent and Rinse Aid pumps
  - k. Pressure regulator valve
- 15. Item No. 27 Vent Duct, Rectangular (1) Custom Fabricated
  - a. Fabricated per details on Drawing NVTC15
- 16. Item No. 28 Open Number
- 17. Item No. 29 Open Number
- 18. Item No. 30 Cold Food Station (1) Delfield SCSC-60B
  - Alternate manufacturers and model numbers:
     Atlas CWCM-4 Stainless Steel, Caddy RIF-604, or Approved Equal
  - b. Fold down work shelf
  - c. Undershelf
  - d. Double overshelf
  - e. Polyurethane casters
  - f. Cord and plug, 36" Long
- 19. Item No. 31 Hot Water Booster Heater (1) Hatco C-36 or Approved Equal

- a. Standard accessories: castone tank, low-water cut-off, temperature/pressure relief valve, cast iron pressure reducing valve, two temperature/pressure gauges, indicator light, and on/off switch
- b. All stainless steel body and base
- c. Brass pressure reducing valve in lieu of cast iron
- d. Slide brackets to install unit under top of Dishtable
- e. Shock absorber
- f. Interconnect with existing Dishmachine, Hobart CRS66A.
- g. Verify incoming hot water temperature.
- 20. Item No. 32 Circular Tray Conveyor, Modify (1)
  - a. Existing, Modify and Repair
  - b. Modify Tray Carriers to hold new trays that are 1" longer than existing trays. See details on Drawing SWVTC14.
- 21. Item No. 33 12-Gallon Kettle & Stand (2) Cleveland KGT-12-T/ST28
  - a. Alternate manufacturers and model numbers:
     Intek IGC12/ISD, Southbend KGCT12/KEDC or or Approved Equal
  - b. Lift-off cover
  - c. Double pantry faucet with swing spout
  - d. Faucet mounting bracket
  - e. 316 Stainless steel interior for high-acid product
  - f. Kettle Stand
  - g. Cord and plug
  - h. Natural gas
- 22. Item No. 34 Dishtable Modification, Add Hot Water (1)
  - a. Add hot water connection and gusher at end of trough farthest away from existing disposer.
  - Modify the existing dishtable per Plan, elevations and details on Drawing NVTC15. Extend a portion of the dishtable to accept one standard 20" x 20" rack.

**END OF SECTION 11400** 

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